

RESEARCH ASSOCIATE
Experimental High Energy Physics

The Department of Physics at Stanford University is inviting applications for a postdoctoral research associate to participate in a long baseline neutrino experiment, MINOS, utilizing a beam from Fermilab and a detector at Soudan in northern Minnesota.

The MINOS experiment is designed to be sensitive to $\nu_\mu \rightarrow \nu_e$ and $\nu_\mu \rightarrow \nu_\tau$ oscillations down to $\sin^2 2\theta = 0.01$ and to Δm^2 values below 10^{-3} eV^2 . Thus the experiment will be able to cover the full Super-K suggested region of oscillation parameter space. The neutrino beam will be produced by the protons extracted from the Fermilab Main Injector, a recently constructed 120 GeV proton synchrotron. The far detector will be a multi-kiloton magnetic iron/scintillator spectrometer in the Soudan mine in Minnesota, some 730 km away. The existing Soudan 2 detector will also form part of the experimental apparatus. This experiment was endorsed in 1995 by HEPAP as an important element of the future US high energy physics program. This endorsement has been reaffirmed by several subsequent reviews. The project has been baselined in the fall of 1998, and the conventional construction is well underway both at Fermilab and at Soudan. The installation of the detector in the Soudan mine should start in the spring of 2001 and the data taking before the end of 2003.

It is anticipated that the majority of the successful applicant's time will be spent in residence at Stanford, working mainly on MINOS simulations and design and construction of the detectors and neutrino beam elements. It is expected that the successful applicant will spend some time at Soudan during the installation and commissioning phase of the experiment. The initial appointment will be for three years with the possibility of an extension.

Interested applicants are requested to send three letters of reference and a resumé to:

Professor Stanley Wojcicki
Stanford University
Physics Department
Stanford, CA 94305-4060

The applications will be accepted until September 1, 2000 or until the position is filled.

Stanford University is an equal opportunity, affirmative action employer. We are especially interested in receiving applications from female and minority physicists.